

reduced diastolic blood pressure ( $r=-0.55$ ;  $p=0.01$ ). In the non diabetic group, tHcy levels were negatively correlated with HTase activities ( $r=0.75$ ;  $p=0.00$ ) and diet score ( $r=-0.70$ ;  $p=0.01$ ) while HTase activities were positively correlated with diet score ( $r=0.75$ ;  $p=0.00$ ).

**Conclusion:** Elevated homocysteine in diabetic patients may partly be explained by the diminished HTase and could be considered as an additional risk factor for cardiovascular events. Adherence to Mediterranean diet could be the first efficient step to prevent these complications.

## 066

### Left main coronary stenting in a non surgical octogenarian population: a possible approach

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**Aims:** Coronary artery bypass grafting is conventionally considered the standard treatment for significant left main coronary artery (LMCA) disease. The management of severe coronary artery disease in the octogenarians is still highly debated. The aim of this study was to appreciate safety and effectiveness of percutaneous coronary intervention (PCI) in octogenarians who were denied by the heart team for surgical revascularization.

**Methods and Results:** The study included 70 consecutive patients  $\geq 80$  years of age who had undergone PCI for the treatment of LMCA and who were primary denied by our center's heart team for surgical revascularization. In our study mean age was  $83.4 \pm 2.6$  years [range 80-89]. Mean Euroscore was  $21.1 \pm 16.7$  and mean Syntax score was  $28.6 \pm 8.7$ . Ten (14%) were treated with LMCA PCI in the context of ST-segment Elevation Myocardial Infarction (STEMI). Overall in-hospital mortality was 11%. There were two cases of fatal stent thrombosis at 2 and 7 days respectively after DES implantation. Mean follow-up time was  $27.2 \pm 24.9$  months [range 4-80 months]. Overall mortality at the end of follow-up was 28%. Cardiac death was found in 18 patients and 2 patients died from terminal renal insufficiency. 2 other patients (3%) presented with a new STEMI, 7 (10%) with a new non-STEMI, 13 (19%) with heart failure and 2 (3%) had minor hemorrhage. There was a percutaneous target vessel revascularization in 7 (10%) patients. During follow-up, the total major adverse cerebral and cardiovascular event (MACCE) was 48.5%. Distal LMCA disease and male sex were independent factors predicting mortality ( $p<0.05$ ).

**Conclusions.** Stent implantation was technically feasible and relatively safely applied for the treatment of LMCA disease in octogenarian who were refused for surgery and who represented a high risk population for PCI and coronary events. Despite a high rate of MACCE, the clinical long term outcome seems good for this specific population with heavy basal status.

## 067

### CYP2C19 but not PON1 genetic variants influence clopidogrel pharmacokinetics, pharmacodynamics and clinical efficacy in post-myocardial infarction patients

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**Background:** Reduced concentrations of clopidogrel active metabolite have been associated with diminished platelet inhibition and higher rates of adverse cardiovascular events. Paraoxonase-1 (PON1) has recently been proposed as a key enzyme for clopidogrel metabolic activation. We tested the effects of PON1 polymorphisms on clopidogrel pharmacokinetics (PK) and pharmacodynamics (PD), and the occurrence of cardiovascular outcomes in young post-MI patients treated with clopidogrel.

**Methods and Results:** We genotyped PON1 (Q192R and L55M) and CYP2C19 variants in 106 patients enrolled in the PK/PD CLOVIS-2 trial. Patients were randomly exposed to 300mg or 900mg clopidogrel loading dose in a cross-over study design. Clopidogrel active metabolite isomer H4 (clopi-H4) and platelet function testing were measured serially post-loading dose. There was no significant association between PON1 Q192R or L55M and clopi-H4 formation or antiplatelet response to clopidogrel following either

loading dose. Using multivariable linear regression analyses, the CYP2C19\*2 allele was the only predictor of clopi-H4 generation and platelet response irrespective of the platelet function assay. CYP2C19 loss-of-function but not PON1 variants were significantly associated with increased risk of major cardiovascular events (death, myocardial infarction and urgent coronary revascularization) occurring during long-term clopidogrel exposure in 371 young post-MI patients (<45 years) enrolled in the AFIJ cohort: CYP2C19 loss-of-function allele carrier vs non carrier, HR 2.26 95%CI [1.15-4.41],  $p=0.02$ ; PON1 QQ192 vs QR/RR192, HR 1.03 95%CI [0.50-2.11],  $p=0.93$ ; PON1 MM55 vs ML/LL55, HR 1.52 95%CI [0.75-3.08],  $p=0.24$ .

**Conclusion:** Our study does not confirm that PON1 Q192R or L55M can influence clopidogrel PK or PD in post-MI patients.

14<sup>th</sup> January, Saturday 2012

## 068

### Magnetocardiographic indices in assessment of patients with myocarditis and acute STEMI

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**Aims:** To assess ability of different magnetocardiographic (MCG) indices to discriminate between ischemic changes of electrophysiologic properties of myocardium early after STE AMI and non-ischemic changes.

**Methods:** 32 pts with STE AMI (21 pts with ischemia on stress test – 1st group and 11 pts without ischemia – 2nd group examined on 7-10th day after STE AMI), 32 pts with myocarditis (3rd group) and 34 healthy (4th group) were evaluated. All patients had neither conduction abnormalities, ischemic changes on resting ECG, nor LV hypertrophy, systolic dysfunction on EchoCG. Healthy and AMI pts had exercise test on the same day with MCG. Averaged deviations of largest vectors of current density distributions (CDD) on ST slope starting at 60 ms from J to Tapex (first half of this ST portion – D1, second half – D2), second portion of Ta-Te (D4) and differences in directions of vectors of CDD on R and Tapex (delta RTa), ratios between global CDD on peak R to that on Tapex (GCDD-RTa) were assessed.

**Results:** In 1st, 2nd, 3rd and 4th groups median D1 were 9.0, 5.0, 3.0, and 2.25 grads respectively,  $p<0.05$ ; median D2 were 11.9, 5.3, 3.5, and 1.60 grads,  $p<0.01$ ; D4 were 12.3, 6.3, 7.3, and 5.0 grads,  $p<0.05$ ; median delta RTa were 47.0, 32.5, 22.5 and 12.5 grads respectively,  $p<0.01$ . Best sensitivity (91%) and specificity (71% and 76%) in discerning patients with and without ischemia after MI were  $D2>8.1$  and  $\text{delta RT} >69.5$  grads.

Of parameters consistent with myocarditis was ratio GCDD-RTa (In 1st, 2nd, 3rd and 4th groups median GCDD-RTa 3.24, 4.01, 7.13 and 5.0 respectively,  $p<0.01$  between 3rd group and other study groups) which did not differ significantly in STEMI patients.

**Conclusion:** MCG is informative for assessment of patients with and without coronary artery disease. MCG is capable of detection changes in electrophysiologic properties in myocardium susceptible to ischemia and may be used to select patients with STE MI who need revascularization.

## 069

### Evaluating in a “real-world” the performance of CRUSADE and MEHRAN bleeding risk scores to predict major bleeding complications among Tunisian patients with ACS

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**Background:** Bleeding is a major complication in patients treated for acute coronary syndromes (ACS) with antithrombotic and invasive therapies. Consequently, the benefit of such therapies should be balanced against the potential risk of hemorrhagic complications. CRUSADE and more recently